## REMARKS

The Office Action mailed November 17, 2004 and the references cited by the Examiner have been carefully reviewed by Applicants. Claim 1-34 are pending in this case. Applicants have amended claims 1, 12, and 19, cancelled claims 8-11, and added new claims 31-34. Applicants have also provided replacements sheets for Figures 1 and 2, added new Figure 5, and made certain amendments to the specification. Applicants submit that the amendment to the claims and specification, replacement figures and new figure are proper. Applicants respectfully request that the Examiner enter the amendments to the claims and specification, replacement sheets, and new figure. Applicants submit that the amended and newly added claims, for the reasons discussed below, place this case in condition for allowance and Applicants earnestly seek such allowance.

### Provisional Double Patenting Rejection

In the Office Action mailed November 17, 2004, the Examiner Provisionally rejected claim 1 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 6-7 of co-pending Application No. 09/919,436. Applicant will consider filing a Terminal Disclaimer in the event this becomes a formal grounds for rejection.

### Corrections and Objection to Drawings

In the Office Action mailed November 17, 2004, the Examiner requested that drawings Figures 1 and 2 be corrected to designate the figures as Prior Art in a legend and that the substitute drawings be labeled "Replacement Sheet" in the page header. Enclosed herewith are corrected Figures 1 and 2 which include the "Prior Art" legend and "Replacement Sheet" label required by the Examiner.

The Examiner also objected to the drawings on the basis that the drawings must show every feature of the invention specified in the claims. The Examiner identified claim 1 and stated that the claimed methods must be shown or the feature(s) canceled from the claim(s). The Examiner noted that no new matter should be entered.

According to MPEP 601.01(f), "it has been the USPTO practice to treat an application that contains at least one process or method claim as an application for which a drawings is not necessary for an understanding of the invention under 35 U.S.C. 113 (first sentence)." Applicants note that claim 1 is a method claim, so Applicants do not consider a drawing necessary to support these claims. However, Applicants' understanding of the Office Action is that the Examiner is requiring such drawings. As far as Applicants understand, the only basis for such a requirement is in 35 U.S.C. 113 which states, "when the nature of such subject matter admits of illustration by a drawing and the applicant has not furnished such a drawings, the Director may require its submission." Such submission would, of course, be subject to the limitations of the third sentence of 35 U.S.C. 113. Therefore, Applicants consider it proper to include herewith the drawing labeled Figure 5, since it has been required by the Examiner and is permitted by 35 U.S.C. 113.

Applicants respectfully submit that the replacement sheets and newly submitted figure overcome the Examiner's objections to Figures 1 and 2, and satisfy the Examiner's requirements regarding illustration of method claim 1.

<u>Amendment to the Specification</u>

Applicants have noted new Figure 5 in the Brief Description of the Drawings portion of the specification.

11

Applicants have copied the text of original claim 1 into the specification after paragraph

51, which is proper and does not add new matter since the claims are part of the original

disclosure, and referenced Figure 5 which was required by the Examiner.

Request for Information

In the Office Action mailed November 17, 2004, the Examiner requested all information

on The Object Management Group's Notification Service Versions 1.0 and 1.1 be provided.

Enclosed herewith are Object Management Group's Notification Service Versions 1.0 and 1.1.

Applicants note that the Examiner waived the fee and certification requirements of 37 C.F.R.

1.97 for these documents.

Rejection of Claims under 35 U.S.C. 112

In the Office Action mailed November 17, 2004, the Examiner rejected claim 1 as failing

to comply with the enablement requirements. The Examiner stated that Applicants' specification

provides not details as to how a message is converted from a native language format to a

structured event message format, as in claim 1.

Applicants respectfully submit that the specification provides ample support for claim 1

to enable one skilled in the art. Specifically, paragraph 4 (Background of the Invention of

Applicants' specification) states that message oriented middleware products "can typically send

and receive data in the native data formats of the applications they connect, adapters are typically

not needed to convert data from the format of the applications to the format of a

publish/subscribe engine serving as the brokering hub." Applicant submits that the message

oriented middleware such as JMS and CORBA are operable to communicate messages in their

native formats of JMS and CORBA, respectively. Applicants further submit that the native

format of, for example, JMS messages are well known, and therefore, communication with messages in such native formats are well known.

Applicants further submit that Figure 4 and paragraphs 27–52 of Applicants' specification provide a comprehensive description sufficient to enable one of ordinary skill in the art regarding the format of a structured event message. Paragraph 25 of Applicants' specification states that "the data format used for messages in the Middleware Brokering System is known as a structured event and is described in The Object Management Group's Notification Service Specification Versions 1.0 and 1.1, which are incorporated herein by reference in their entirety and from which the following descriptions of the fields in a structured event are taken." The noted Notification Service Specification Versions 1.0 and 1.1 are well known in the art and are the same requested by the Examiner in the Request for Information and included with this response. Thus Applicants respectfully submit that converting messages from a native format, such as JMS, to the format of a structured event message is enabled by Applicants' specification sufficient to teach one skilled in the art how to make and use the invention placing the public in possession of the invention claimed in Applicants' claim 1. For this reason, Applicants respectfully request that the Examiner withdraw the rejection of Claim 1 under 35 U.S.C. 112.

<u>Rejection of Claims under 35 U.S.C. 102</u>

The Examiner rejected Applicants' claims 1-18 as being anticipated by Maffeis (U.S. Patent No. 6,721,779). Applicants have amended claims 1, 12, and 19, and added new claims 31-34 to further clarify that the present invention. The present system, as claimed in amended claim 1, is directed to a method for adapting the format of a message. The method includes mapping a plurality of fields in a first message, which is in a first native message format, with

13

corresponding fields in a first structured event message, which is in a structured event message format. The method also includes mapping a plurality of fields in a second message, which is in a second native message format, with corresponding fields in a second structured event message, which is in the structured event format. The present system, as described in Figure 3 relates generally to a middleware brokering system that brokers messages between middleware components, such as between a mainframe 310 using an MQ Series, CORBA 320, and JMS 330. The middleware brokering system, may be thought of as, for example, middleware for middleware.

Maffeis addresses the problem that to support wireless mobile devices requires the middleware vendor to implement a message transmission protocol (TCP/IP, HTTP, SSL) atop a wireless transport protocol (WAP, GSM, SMS, GPRS, UMTS) and to integrate this message transmission protocol into the middleware. (Maffeis col. 1, lines 28-33) Maffeis discloses a message proxy 1 servicing a JMS message oriented middleware 3 and thin JMS message clients 2, 2', 2". (Maffeis col. 2, lines 54-58) The message proxy 1 is shown having six specific wireless transport protocol adapters 1a-1f to promote communication between the JMS thin clients 2 and the JMS message oriented middleware 3. (Maffeis col. 3, lines 5-9) The Maffeis reference, however, fails to teach, disclose, or suggest a middleware brokering server that maps messages between middleware computing system message formats and structure event message format, as claimed by Applicants' amended claim 1.

Maffeis teaches only one message oriented middleware 3 and no middleware brokering server. The message proxy 1 is not analogous to applicant's middleware brokering server, since the message proxy 1 acts as a proxy only for a single message oriented middleware 3. (Maffeis col. 2, line 67 – col. 3, line 4.) Maffeis suggests that any number of message proxies 1, thin

14

JMS message clients 2, and message oriented middleware products 3 may be present. (Maffeis col. 2, lines 61-63) However, additional message proxies 1 and message oriented middleware products 3 added to Maffeis would not produce Applicants' invention. Instead, each additional message proxy 1 would service a specific, separate message oriented middleware product 3, and each additional message proxy 1 would only promote communication between the JMS thin clients 2 and the message oriented middleware 2 for which the additional message proxy 1 serves. Applicants' invention, as claimed in claim 1 is directed to receiving messages from different middleware system in different formats, and converting these message into messages in structured event format. Applicants respectfully submit that the Maffeis reference fail to teach, disclose, or suggest Applicants' invention as claimed in amended claim 1.

Applicants respectfully submit that the text (Maffeis col. 3, lines 5-22) cited by the Examiner in rejecting claim 1 is directed to network and wireless transport protocols and fails to teach, disclose, or even suggest a structured event message format. For all these reasons, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. 102 rejection of claims 1 and dependent claims 2-7, 12-31, and pass these claims to issue.

The Examiner rejected claims 3-18 and stated that Maffeis teaches a JMS system and that the claim formats are inherent to a JMS system. Applicant respectfully submits that Maffeis fails to disclose structured event messages and formats or converting any portion of JMS messages to structured event message formats. Further, claims 5, 6, and 14 are directed to conversion to the domain name and type name portions structured event message. As discussed in paragraph 26 of the specification, certain specific combinations of data and choices were made to generate unique event types among all event types within a particular business enterprise. Applicants respectfully submit that Maffeis fails to teach, disclose, or even suggest Applicant's invention as claimed in

15

claims 3-7 and 12-18.

### Rejection of Claims under 35 U.S.C. 103

The Examiner rejected claims 19-30 under 35 U.S.C. 103 based on a single reference, Maffeis, and the Examiner taking Official Notice that mainframe systems use COBOL copybook. Applicants submit that the Examiner has failed to provide any disclosure, teaching, or suggestion for mapping COBOL copybook format to structured event format. Furthermore, as mentioned in paragraph 19 of the specification, existing technology requires mainframe systems to use object request brokers to communicate with distributed systems. Applicants' innovation of mapping the COBOL copybook format to structured event messages provides an advantage over existing technology by enabling communication with distributed systems without the use of object request brokers. Applicants were the first to use a middleware brokering system employing structured event messages to communicate messages between distributed systems and middleware. Without applicants' invention, as mentioned in paragraph 21 of the specification, the different systems would need to operate in a point-to-point fashion and the number of adapters needed would be greater.

Applicants respectfully submit that for these and the reasons stated above and incorporated herein by reference that the Maffeis reference, either alone or in combination with the other references cited by the Examiner, fail to teach, disclose, or suggest Applicants' invention as claimed claims 19-30.

### Newly Added Claims

Applicants have added claims 31-34 to clarify aspects of Applicants' invention. To make room for these claims with no additional fee, Applicants have cancelled claims 8-11. This cost

16

efficiency is the only reason for the cancellation of claims 8-11. Claim 31 depends from claim 2 and adds that the first message is a JMS message converted to a structured event message and that the second message is a mainframe message format converted to a second structured event message.

Applicants have added independent claim 32 which is directed to a method of brokering messages between middleware systems including using the middleware brokering system to determine the destination for each of the messages from the JMS, CORBA, and mainframe systems, and directing each of the messages to the appropriate one of the JMS, CORBA, and mainframe systems. Applicants' claim 33 is directed to converting the structured event messages back to the formats of the systems for which they are destined, such as JMS and mainframe.

Applicants' claim 34 is directed to registering each of the messages with a publish/subscribe engine, and brokering the messages between the JMS, CORBA, and mainframe system. Applicants respectfully submit that newly added independent claims 32, and dependent claims 33 and 34, are allowable since the cited reference fail to teach, disclose, or suggest the aspects of these claims. For all these reasons, Applicants respectfully submit that claims 1-7 and 12-34 are allowable, and Applicants earnestly seek such allowance.
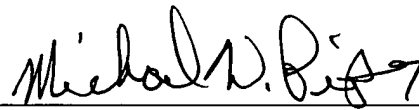
## Conclusion

Applicants respectfully submit that the application in its present form is in condition for allowance. If the Examiner has any questions or comments or otherwise feels it would be helpful in expediting the application, Examiner is encouraged to telephone the undersigned at (972) 731-2288. Applicants intend this communication to be a complete response to the Office Action mailed on November 17, 2004.

17

The Commissioner is hereby authorized to charge payment of any further fees associated with any of the foregoing papers submitted herewith, or to credit any overpayment thereof, to Deposit Account No. 21-0765, Sprint.

Respectfully submitted,

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18